



Training Session 2 “Evaluating the impact of climate change on agriculture and farmer’s decision using bio-economic models” – Egypt SupMed project

7th, 8th, and 9th of November, 2022

Aswan, Egypte

[Activity A.5.2]

1. Objectives

The SupMed project aims to improve farmer’s resilience in Luxor (Egypt) and the Baalbek-Hermel (Lebanon) regions to climate change and market uncertainty. For this, the project will, in close interaction with local stakeholders, propose implement and evaluate agro-ecological practices and their socio-economic impacts.

The objectives of this seminar/workshop will be threefold. Firstly, to introduce the bio-economic modeling methodology in a greater audience. Secondly, to describe and discuss the performance of current representative farm types in the Luxor area. And lastly, to train the participants in farm-level bio-economic models for decision-making in complex issues, such as tradeoffs between competing issues (economic, agronomic, and environmental) or deciding between different conservation policies.

This session is targeted to all academics, researchers, young researchers, and Ph.D. students of the University of Aswan.

2. Program

Day1 - November 7th, 2022: Bio-economic modelling. From conceptual to numerical model to represent farming systems diversity, functioning and performance. Presentation of the tested scenarios and simulation results

Speakers: Dr Georgios KLEFTODIMOS –Dr Othman El CHEIKH- Dr Mohamed El Khansa

- 9h – 10h30: Presentation of SupMed projects and of the selected case studies
- 10h30 – 11h15: Coffee break
- 11h15 – 13h: Introduction in the bio-economic modeling as a decision making tool.
- 13h – 13h30: Lunch
- 13h30 – 15h: Presentation of the farm-types in Luxor case study

Day 2-November 8th, 2022: Description and discussion of the performance of current representative farm types in the Luxor area and Lebanon. This session will include also the definition of scenarios and indicators selection to improve the resilience end the livelihood of currents farms.

Speakers: Dr Mohamed El Khansa- Dr Georgios KLEFTODIMOS

- 9h – 10h30: Presentation of the selected scenarios and indicators
- 10h30 – 11h15: Coffee break
- 11h15 – 13h: Presentation of the simulated results
- 13h – 13h30: Lunch
- 13h30 – 15h: Presentation of the simulated results

Day 3 - November 9th, 2022: Scenarios assessment by running the bio-economic model. This session will also include discussion on the model results in the short and long terms. Working groups will be setup to propose and simulate simple scenarios to test model sensitivity and impacts by considering market and climate uncertainties.

Speakers: Dr Georgios KLEFTODIMOS – Dr Othman El CHEIKH- Dr Mohamed El Khansa

- 9h – 10h30: Communication of the model to the participants and workshop on scenario simulations
- 10h30 – 11h15: Coffee break
- 11h15 – 15h : Workshop on scenario simulations